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REMARKS/ARGUMENTS

Favorable consideration and allowance of the instant application is respectfully requested in view of the following remarks.

Claims 9-20 are pending in this application.

The Examiner's rejections, as they pertain to the patentability of the claims, are respectfully traversed.

Claims 9, 10, 12-16 and 18-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 5,939,079. This rejection is respectfully traversed for the following reasons.

The Examiner had initially based her conclusion of prima facie obviousness on the '079 reference's teaching that metal soaps having a particle size of less than 10 μm may be used as a filler in its dispersion. While the Examiner acknowledged that this reference failed to teach the claimed particle size of from about 10 to 100 nm, the Examiner attempted to overcome this lack of teaching by shifting the burden of proof onto Applicant to show why it would not, via mere optimization, be obvious to employ metal soap nanoparticles having the claimed particle size.

The claimed invention requires the use of metal soaps having a particle size of from about **10 to 100 nm**. The '079 reference, on the other hand, discloses the use of metal soaps having a particle size of **less than 10,000 nm**. The Examiner contends, however, that because the particle size range disclosed by the '079 reference, i.e., **less than 10,000 nm**, encompasses the instantly claimed particle size range, i.e., **10 to 100 nm**, the use of the claimed smaller particles involves nothing more than mere optimization which would be obvious to one of ordinary skill in the art. In essence, therefore, the Examiner is arguing that the difference between the claimed particle size range and that of the '079 reference is so trivial that it would be obvious for the routineer to wish to employ it. Assuming the Examiner's argument to be well founded, the same logic would hold true regardless of the

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number of zeros contained in the '079 reference's particle size number so long as the words less than preceded that number. For example, assuming arguendo that the '079 reference disclosed the use of metal soaps having a particle size of **less than 10^{10} nm** or perhaps **less than 100^{100} nm** or even perhaps a particle size of **less than infinity**, were disclosed by the '079 reference, because all of these ranges encompass the claimed range, said claimed range might arguably be obvious on grounds of mere optimization.

Applicant respectfully submits that a particular parameter must first be recognized as a result-effective variable **before** the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. See, *MPEP 2144.05*.

Nowhere within the four corners of the '079 reference is it taught and/or suggested that the particle size of the metal soap is a result-effective variable. On the contrary, in view of the '079 reference's disclosure of **numerous** filler candidates, including both organic and inorganic varieties, along with their attendant variable particle sizes, it is clear that the particle size of the filler component employed by the '079 reference is **NOT** considered by this reference to be a result-effective variable. As a result, the Examiner's argument concerning "optimization" of this variable being obvious is clearly misplaced.

Moreover, with respect to the Examiner's attempt to place the burden of proof on Applicant to show that the claimed particle size is unobvious, Applicant would again like to note that it is extremely well settled in the law that the mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an Applicant to prove conclusively that the Patent Office is wrong. See, *In re Soli*, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the Examiner's unsupported allegation that a particular modification is known, or easily discoverable by routine experimentation, and therefore obvious. Subjective opinions are of little weight in determining obviousness. See, *In re Wagner et al*, 152 USPQ 552 (CCPA 1967).

Finally, Applicant would again like to note that the Examiner's conclusion of

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obviousness is believed to be based on an impermissible "obvious to try" rationale. It is well settled that where the prior art gives either no indication as to which parameters are critical or no direction as to which of many possible choices is likely to be successful, prima facie obviousness may not be based on an improper "obvious to try" rationale. See, In re O'Farrell, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988). Clearly, such is the case here.

Accordingly, for all of the above-stated reasons, reconsideration and withdrawal of this rejection is respectfully requested.

Claims 11 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the '079 reference as applied above to claims 9, 10, 12-16 and 18-20, and further in view of US 2,456,437. This rejection is respectfully traversed for the following reasons.

The '437 reference is relied upon merely for its teaching regarding the use of organic material to coat soap particles. Applicant had previously argued that the problem with its teaching, however, is that it is silent with respect to the potential for using organic materials to coat **inorganic** soap particles such as the claimed **metal** soap particles. The only soap particles referred to by this reference, which are coated with its organic coating material, are sodium soaps of fatty acids. Thus, even a person of ordinary skill in the art had both the '079 and '437 references in front of them, they would not necessarily be motivated to apply the organic material of the '437 reference onto the metal soaps of the '079 reference since there is no teaching or suggestion that this can be successfully done.

Moreover, there is no teaching or suggestion in either reference that the problem addressed by the '437 reference, i.e., dust particles, is also a problem experienced by metal soaps. Thus, in Applicant's opinion, the use of the organic materials of the '437 reference on the metal soaps of the '079 reference is far from obvious.

In response to Applicant's above-noted argument, the Examiner now contends that because the '437 reference fails to exclude inorganic soap particles but instead refers to soap particles in general, it would thus be prima facie obvious to the routineer to want to coat inorganic soap particles. Applicant was under the impression that prima facie

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obviousness needed to be premised upon a teaching or suggestion within a relied upon reference. The Examiner, however, has chosen to exercise a different standard of proof for determining obviousness. According to the Examiner's rationale, prima facie obviousness can be based on the silence of a reference, i.e., based on what it **doesn't teach or suggest**. As a result, the Examiner has concluded that because the '437 reference doesn't teach or suggest that inorganic soap particles can be coated with its organic materials, it is prima facie obvious to the routineer to do so. Applicant respectfully disagrees with the Examiner's rationale and conclusion. Applicant believes that prima facie obviousness must be based upon what a prior art reference says, not on what it doesn't say.

It is well settled in the law that the mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an applicant to prove conclusively that the Patent Office is wrong. See *In re Soli*, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the Examiner's unsupported allegation that a particular modification is known and therefore obvious. Subjective opinions are of little weight in determining obviousness. See *In re Wagner et al*, 152 USPQ 552 (CCPA 1967).

Finally, in view of the shortcomings associated with the '079 reference, i.e., its lack of teaching, suggestion **or motivation** to employ inorganic nanoparticle fillers possessing the claimed particle size, as outlined above, even if these two references were combined, as is suggested by the Examiner, their combined teachings would nevertheless fail to render the claimed invention prima facie obvious.

Accordingly, for all of the above-stated reasons, reconsideration and withdrawal of this rejection is respectfully requested.

It is believed that the foregoing reply is completely responsive under 37 CFR 1.111 and that all grounds for rejection are completely avoided and/or overcome. A


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Notice of Allowance is therefore earnestly requested.

The Examiner is requested to telephone the undersigned attorney if any further questions remain which can be resolved by a telephone interview.

Respectfully submitted,

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